Iowa Department of Natural Resources Environmental Protection Commission

TOPIC Contract - Iowa Cooperative Fish and Wildlife Research Unit at Iowa State University for Stream Habitat Assessment

The Department requests Commission approval of a contract in the amount of \$68,804 with the Iowa Cooperative Fish and Wildlife Research Unit at Iowa State University for stream habitat assessment.

This contract builds upon existing efforts by the Iowa Department of Natural Resources to assess the biological health of Iowa's stream resources. For the past two years, the DNR has been monitoring water chemistry, fish populations, benthic macroinvertebrate populations, and sediment and fish tissue contamination as part of an EPA initiative: The Regional Environmental Monitoring and Assessment Program (REMAP). While stream habitat is also an important component of aquatic system health, it has not been intensively monitored as part of the current program due to labor costs associated with collecting this type of data. The DNR proposes to work with Dr. Clay Pierce of the Iowa Cooperative Fish and Wildlife Research Unit at Iowa State University to collect stream habitat data. This project will collect the necessary habitat at the randomly selected REMAP sites. This contract represents the third year of a three year project and provides funding for data collection, analysis, and reporting for 52 stream sites.

Objectives of the project include:

- 1. Quantify stream habitat conditions in 45 sites per year throughout Iowa, representing 2nd-through 5th-order streams and all major ecological subregions.
- 2. Determine and describe relationships of stream habitat with fish communities, invertebrate communities, stream reach characteristics, land use and ecological subregions.
- 3. Identify ecoregion, stream reach and land use characteristics associated with good stream habitat conditions.
- 4. Identify stream habitat characteristics associated with good invertebrate and fish communities.
- 5. Evaluate and recommend habitat mitigation and rehabilitation alternatives.

The project will use standard EPA protocols for the collection of stream habitat data and therefore ensure compatibility with data collected in surveys from other parts of the United States. Results from these surveys can be joined to form a regional or national assessment that is consistent across geopolitical boundaries.

Funding for this agreement is from the Environment First Fund.

Mary Skopec

Section Supervisor Water Monitoring and Assessment Section Iowa Geological Survey and Land Quality Bureau Environmental Services Division

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Appendix A – Year 1 Budget

	FY07 Budget			
Salaries & Wages	Graduate Student (12 mo x \$1632/mo)			
	Seasonal Technician (\$9.00/hr x 40hr x 14wk)	\$5,040		
	GIS Analyst P-13 (1 mo x \$3309/mo)	\$3,309		
Benefits	Graduate Student (11.5%)	\$2,252		
	Seasonal Technician (12%)			
	GIS Analyst P-13 (32.5%)			
Student tuition	1/2 in-state graduate tuition (\$3726 for acad. yr, \$1038 for summer)	\$4,764		
Travel	per diem; fieldwork (\$31/dy x 2 people x 45dy)			
	lodging; fieldwork (\$45/dy x 2 people x 45dy)	\$2,790 \$4,050		
	vehicle; fieldwork (\$0.45/mi x 350mi x 45 trips)			
	meetings (coordinate with DNR staff and present results)			
Equipment		0		
Supplies	chest waders (2 pair)	\$300		
	other (waterproof paper, etc.)	\$200		
Misc.	Cellular phone, copying, instrument maintenance and calibration, etc.	\$1,557		
	Taxonomic consultation (\$330/sample x 43 samples)	\$14,190		
Total Direct				
Cost	Cost to DNR in FY07	\$68,804		
Indirect Cost*	Waiver of standard 47% overhead by Iowa State University	\$30,099		
Total Project Cost Direct+ Indirect Costs				
*Indirect cost is 0	% according to Cooperative Agreement 1434-HQ-97-RU-01560.			
The University's f	ull provisional rate was 46% in FY04-05 and 47% in FY06-07.			